AMENDMENTS TO THE CLAIMS:

1. (Previously Presented) A method of treating degeneration of the cartilaginoid matrix comprising administering to a subject in need thereof an effective amount of one or more compounds or pharmaceutically acceptable salts thereof having the following formula:

$$A-(B)_{b0}-(C)_{c0}-N(O)_{S}$$
 (I)

wherein:

s is an integer and is equal to 1 or 2;

c0 is an integer and is equal to 0 or 1;

b0 is an integer and is 0 or 1; with the proviso that at least one of c0 and b0 is different from zero;

 $A = R-T_{1-}$, wherein

R- is the radical of a non steroidal antiinflammatory precursor drug excluding the compounds having 2-oxo-1H-indolic structure, or the radical of a non steroidal antiinflammatory/analgesic drug;

 $T_1 = (CO)_t$ or $(X)_{t'}$, wherein $X = -O_{-}$, $-S_{-}$, $-N(R_{1C})_{-}$, R_{1C} is H or C_1 - C_5 linear or branched alkyl, t and t' are integers and equal to zero or 1, with the proviso that t = 1 when t' = 0; t = 0 when t' = 1;

 $B = -T_B - X_2 - T_{BI}$ - wherein

 T_B and T_{BI} are equal or different;

 T_B = (CO) when the reactive function in the precursor drug is -OH or $-NH(R_{1C})$; T_B = X, as above, when the reactive function in the precursor drug is -COOH;

 $T_{BI} = (CO)_{tx}$ or $(X)_{txx}$, wherein tx and txx have the value of 0 or 1; with the proviso that tx = 1 when txx = 0, tx = 0 when txx = 1; X is as above;

X₂ is a bivalent linking group as defined below;

C is the bivalent radical -T_c-Y- wherein

when b0 = c0 = 1: $T_C = (CO)$ when tx = 0, $T_C = X$ when txx = 0, X being as above;

when b0 = 0: $T_C = (CO)$ when t = 0, $T_C = X$ when t' = 0, X being as above; when c0 = 0: tx = 0, $T_{BI} = X = -O-$;

Y is:

 Y_p :

$$\begin{array}{c|cccc} R_{T|X} & R_{T||X} \\ & & | \\ & & | \\ & & -[C]_{n|X} & -Y^3 - [C]_{n||X} - O - & (III^P) \\ & & & | \\ & R_{T|X'} & R_{T||X'} \end{array}$$

wherein:

nIX is an integer from 0 to 10;

nIIX is an integer from 1 to 10;

 R_{TIX} , R_{TIX} , R_{TIIX} , R_{TIIX} , equal to or different from each other are H or C_1 - C_4 linear or branched alkyl;

Y³ is a saturated, unsaturated or aromatic heterocyclic ring containing one or two nitrogen atoms having 5 or 6 atoms,

or Y can be:

Y₀, selected from the following:

a –R'O– alkylenoxy group wherein R' is linear or branched when possible C₁-C₂₀, or a cycloalkylene having from 5 to 7 carbon atoms, in the cycloalkylene ring one or more carbon atoms can be substituted by heteroatoms, the ring can have side chains of R' type, R' being as above; or one of the following groups:

wherein nf' is an integer from 1 to 6;

wherein R_{1f} = H, CH_3 and nf' is an integer from 1 to 6; or Y is Y_{Ar} and is selected from the following:

$$(CH_2)_{n3}$$
 $O-$

wherein n3 is an integer from 0 to 3 and n3' is an integer from 1 to 3;

wherein n3 and n3' have the above meaning;

- aminoacids,
- hydroxyacids,
- aromatic and heterocyclic mono- and polyalcohols,
- compounds containing at least one free acid function.
- 2. (Withdrawn) The method of claim 1, wherein the precursor of B is selected from the following:
 - aminoacids selected from the following: L-carnosine (formula CI), anserine (CII), selenocysteine (CIII), selenomethionine (CIV), penicillamine (CV), N-acetylpenicillamine (CVI), cysteine (CVII), N-acetylcysteine (CVIII), glutathione (CIX) or esters thereof

(CI) (CII)

- hydroxyacids, selected from the following: gallic acid (formula DI), ferulic acid (DII), gentisic acid (DIII), citric acid (DIV), caffeic acid (DV), dihydrocaffeic acid (DVI), p-cumaric acid (DVII), vanillic acid (DVIII):

aromatic and heterocyclic mono- and polyalcohols, selected from the following: nordihydroguaiaretic acid (EI), quercetin (EII), catekin (EIII), kaempferol (EIV), sulphurethyne (EV), hydroquinone (EVIII), gossypol (EIX), reductic acid (EX), methoxyhydroquinone (EXI), hydroxyhydroquinone (EXII), propyl gallate (EXIII), 3,5-di-ter-butyl-4-hydroxybenzyl-thioglycolate (EXXIV), allopurinol (EXXXI); saccharose (EC), ascorbic (ECI) and isoascorbic acid (ECII), p-cumaric alcohol (ECIII), 4-hydroxy-phenylethylalcohol (ECIV), coniferyl alcohol (ECV):

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$$\begin{array}{c} O \\ HC \\ HC \\ OH \\ HO \\ CH_3 \\ HO \\ CH_3 \\ CH_3 \\ CH_3 \\ OH \\ (EIX) \end{array}$$

compounds containing at least one free acid function, selected from the following: 3,3'-thiodipropionic acid (NI), fumaric acid (NII), dihydroxymaleic acid (NIII), edetic acid (NV):

- 3. (Previously Presented) The method of claim 1, wherein in the compounds of formula (I):
 - when b0 = c0 = 1, the bonds between the drug radical and X_2 and between X_2 and Y are, independently the one from the other, of ester, thioester, amide type; when b0 = 0 and c0 = 1 the bond between the drug radical and Y is of ester, thioester, amide type.
- 4. (Currently Amended) The method of claim 1, wherein the R radical is selected from the following groups:

Group I)

la)

$$R_2$$
 R_1

lb)

$$OCOR_{3O} O(R_{2})_{nI} (R_{1})_{nI}$$

wherein:

 R_1 is H or -OCOR₃; wherein R_3 is methyl, ethyl or C_3 - C_5 linear or branched alkyl, or the residue of an heterocycle with only one ring having 5 or 6 atoms partially or

totally hydrogenated, or aromatic, containing one or more heteroatoms independently selected from O, N and S;

 R_2 is hydrogen, hydroxy, halogen, C_1 - C_4 linear or branched alkyl, C_1 - C_4 linear or branched alkoxyl; a C_1 - C_4 linear or branched perfluoroalkyl; nitro, amino, monoor di- (C_{1-4}) alkylamino;

with the proviso that in formula Ia) R_1 and R_2 are not contemporaneously H; in formula Ib) nI is an integer 0 or 1;

Group II)

lla)

llb)

$$\begin{array}{c|c} & H_3C & CF_3 \\ \hline & N & \\ & H & \end{array}$$

wherein:

R_{II5} is H, C₁-C₃ linear or branched alkyl;

 R_{II6} has the same meaning as R_{II5} , or when R_{II5} is H it is benzyl;

 R_{II1} , R_{II2} and R_{II3} are independently hydrogen, C_1 - C_6 linear or branched alkyl, or C_1 - C_6 linear or branched alkoxy, or C_1 , F_1 , F_2 ;

R_{II4} is R_{II1} or bromine;

IIb) is the residue of the 2-[(2-methyl-3-(trifluoro methyl)phenyl]amino]-3-pyridincarboxylic] acid when T_1 = -CO- and the free valence is saturated with OH the compound is known as flunixin;

Group III) wherein R is:

$$\begin{matrix} R_{2a} \\ R_{1a} - C - \\ R_{3a} \end{matrix}$$

wherein:

 R_{2a} and R_{3a} are H, C_1 - C_{12} linear or branched, substituted or not, alkyl or allyl, with the proviso that when one of the two is allyl the other is H;

R_{1a} is selected from:

$\underline{\text{Group}}$ IIID) R_{1a} corresponds to the following formulas:

wherein the meanings are the following:

- when R_{1a} is as defined in formula (IV), Ketoprofen residue: $R_{III1} \text{ is H, SR}_{III3} \text{ wherein } R_{III3} \text{ is C}_1\text{-C}_4 \text{ linear or branched alkyl;}$ $R_{III2} \text{ is H, hydroxy;}$
- when R_{1a} is as defined in formula (XXI), carprofen residue:

 R_{xxio} is H, alkyl from 1 to 6 C atoms linear or branched, C₁-C₆

 alkoxycarbonyl linked to a C₁-C₆ alkyl, C₁-C₆ carboxyalkyl, C₁-C₆ alkanoyl, optionally substituted with halogens, benzyl or halobenzyl, benzoyl or halobenzoyl;

 R_{xxi} is H, halogen, hydroxy, CN, C_1 - C_6 alkyl containing or not containing OH groups, C_1 - C_6 alkoxy, acetyl, benzyloxy, SR_{xxi2} wherein R_{xxi2} is C_1 - C_6 alkyl; C_1 - C_3 perfluoroalkyl; C_1 - C_6 carboxyalkyl containing or not containing OH groups, NO_2 , amino; sulphamoyl, di-alkyl sulphamoyl with C_1 - C_6 alkyl, or difluoroalkylsulphonyl with C_1 - C_3 alkyl;

 R_{xxi1} is halogen, CN, C_1 - C_6 alkyl containing one or more OH groups, C_1 - C_6 alkoxy, acetyl, acetamido, benzyloxy, SR_{III3} being R_{III3} as above, C_1 - C_3 perfluoroalkyl, hydroxy, C_1 - C_6 carboxyalkyl, NO_2 , amino, C_1 - C_6 mono- or di-alkyl-amino; sulphamoyl, C_1 - C_6 di-alkyl-sulphamoyl, or di-fluoroalkylsulphamoyl as above; or R_{xxi} together with R_{xxi1} is a C_1 - C_6 alkylen-dioxy;

- when R_{1a} is as defined in formula (XXXV) tiaprofenic acid residue:

 Ar is phenyl, hydroxyphenyl optionally mono- or polysubstituted with halogen, alkanoyl and C₁-C₆ alkoxy, C₁-C₆ trialkyl, cyclohexyl, cycloheptyl, heteroaryl, furyl containing or not containing OH, pyridyl;
- when R_{1a} is as defined in formula (II), suprofen residue, R_{3a} is H, R_{2a} is methyl and T_1 = -CO-;
- when R_{1a} is as defined in formula (VI), R is the residue of indoprofen when T_1 = -CO-, R_{2a} = H and R_{3a} = CH₃; of indobufen when R_{2a} is equal to H and R_{3a} = C₂H₅; T_1 = -CO-;
- when R_{1a} is as defined in formula (VIII), R is the etodolac residue when $R_{2a} = R_{3a} = H$ and $T_1 = -CO$ -;
- when R_{1a} is as defined in formula (VII), R is the fenoprofen residue when $R_{3a} = H$, $R_{2a} = CH_3$ and $T_1 = -CO$ -;
- when R_{1a} is as defined in formula (III), R is the fenbufen residue when R_{2a} = R_{3a} = H and T_1 = -CO-;
- when R_{1a} is as defined in formula (IX), R is the flurbiprofen residue when $R_{3a} = H$, $R_{2a} = CH_3$, $T_1 = -CO_7$;

- when R_{1a} is as defined in formula (X) R is the tolmetin residue when R_{2a} = R_{3a} = H, T_1 = -CO-.

In group IIID) R_{1a} corresponds to the following formulas:

- IIIa), when R_{2a} = H and R_{3a} = CH_3 the pranoprofen residue is obtained: α -methyl-5H-[1]benzopyran-[2,3-b]pyridin-7-acetic acid;
- (XXX), when R_{2a} = H and R_{3a} = CH₃ the bermoprofen residue is obtained:
 dibenz[b,f]oxepin-2-acetic acid;
- (XXXI), when R_{2a} = H and R_{3a} = CH₃, R is the radical of the compound CS-670: 2-[4-(2-oxo-1-cyclohexyliden methyl) phenyl]propionic acid;
- (XXXII), when $R_{2a} = R_{3a} = H$, the pemedolac residue is obtained; when R_{2a} = $R_{3a} = H T_1 = -CO$ -;
- (XXXIII), when $R_{2a} = R_{3a} = H$, the pirazolac residue is obtained: 4-(4-chlorophenyl)-1-(4-fluorophenyl)-3-pyrazol acid derivatives;
- (XXXVI), when R_{2a} = H, R_{3a} = CH₃ the zaltoprofen residue is obtained; when the residue is saturated with an hydroxyl or aminic group, or with the carboxylic function the compounds are known as dibenzotiepin derivatives;
- (XXXVII), when $R_{2a} = R_{3a} = H$ the mofezolac residue is obtained: 3,4-di(p-methoxyphenyl)isoxazol-5-acetic acid when the residue is CH₂-COOH;
- (XII), when $R_{2a} = R_{3a} = H$ the bromfenac residue is obtained: 2-amino-3-(4-bromobenzoyl)benzeneacetic acid;
- (XXXX) when $R_{2a} = R_{3a} = H$ the sulindac residue is obtained: (Z)-5-fluoro-2-methyl-1-[[4-(methyl sulphinyl) –phenyl]methylene]-1H-inden-3-acetic acid;

in Group IV) R is

wherein:

 R_{IVd} and R_{IVd1} are at least one H and the other an alkyl from C_1 to C_6 linear or branched, or difluoroalkyl with C_1 - C_6 alkyl, or R_{IVd} and R_{IVd1} form together a methylene group;

R_{IV} has the following meaning;

wherein the compounds of group IV) have the following meanings:

- in formula (IIB):

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 R_{iV-ii} is C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl, C_1 - C_7 alkoxymethyl, C_1 - C_3 trifluoroalkyl, vinyl, ethynyl, halogen, C_1 - C_6 alkoxy, difluoroalkoxy with C_1 -

 C_7 alkyl, C_1 - C_7 alkoxymethyloxy, alkylthiomethyloxy with C_1 - C_7 alkyl, alkyl methylthio with C_1 - C_7 alkyl, cyano, difluoromethylthio, phenyl- or phenylalkyl substituted with the C_1 - C_8 alkyl; T_1 = -CO-;

- in formula (XB), of which the loxoprofen residue has been indicated, the compounds wherein R_{IVd} is H and R_{IVd1} is CH_3 ;
- in formula (IIIB):

 R_{iV-iii} is a C_2 - C_5 branched or not branched alkyl, C_2 and C_3 alkyloxy, allyloxy, phenoxy, phenylthio, cycloalkyl from 5 to 7 C atoms, optionally substituted in position 1 by a C_1 - C_2 alkyl;

and R_{IVd} = H, R_{IVd1} is CH₃, compound known as ibuprofen residue, T₁ = - CO-;

Group V)

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$$(CH_2)_{2} = Rvii - 1 O Rvii$$

$$(IIIC) \qquad (IIC)$$

Group VE)

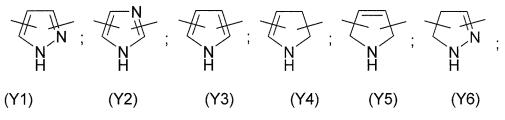
In group V), the compounds have the following meanings:

- when R is the formula (IIC),

R_{Vii} is H or a C₁-C₄ linear or branched alkyl;

 R_{Vii-1} is R_{Vii} , or C_1 - C_4 linear or branched alkoxy; CI, F, Br; the position of R_{Vii-1} being ortho, or meta, or para;

- when R is the formula (VIIC), of which the tenoxicam residue has been indicated, $T_1 = -0$ -;
- when R is the formula (IXC), wherein T_1 = -O-, the piroxicam residue has been indicated;
- when R is the formula (IIIC), wherein T_1 = -CO-, of which the nabumetone residue has been indicated;
- when R is the formula (IVC), $\text{wherein T}_1 = \text{-CO-, of which the indomethacin residue has been indicated};$
- when R is the formula (XC), the residue X is known as meloxicam;
- when R is the formula (XI) the residue is known as ampiroxicam when the termination is -CH(CH₃)OCOC₂H₅;
- when R is the formula (XIII) and the valence is saturated with H, the residue derives from lornoxicam;
- when R is the formula (XXXXV), T_1 = -O- and the valence is saturated with H, the compound known as paracetamol is obtained.
- 5. (Withdrawn) The method of claim 1, wherein in the compounds of formula (I) Y³ of formula (III^P) of C is selected from the following bivalent radicals:



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- (Withdrawn) The method of claim 5, wherein Y³ is selected from the following:
 (Y12) with the two free valences in the ortho positions with respect to the nitrogen atom; (Y16) with the two valences linked to the two heteroatoms, Y1 (pyrazol)
 3,5-disubstituted.
- 7. (Previously Presented) The method of claim 1, wherein the compounds or pharmaceutically acceptable_salts thereof of formula (I) are selected from the group consisting of:

2-acetyloxybenzoic acid 3-nitrooxymethyl phenyl ester (I^C);

2-fluoro-alpha-methyl[1,1'-biphenyl]-4-acetic acid 4-ni-trooxy butylester (II^C);

2-[(2,6-dichlorophenyl)amino]benzenacetic acid 4-ni-trooxy butyl ester (III^C);

(S)-N-acetyl-[alpha-methyl-4-(2-methylpropyl)benzen-acetyl] cysteine 4-nitrooxybutylester having formula:

$$(IV^{c})$$

4-nitrooxybutanoic acid 4-acetylaminophenylester (V^C);

trans-3-[4-[2-fluoro-alpha-methyl(1,1'-biphenyl)-4-acetyloxy]-3-methoxyphenyl]-2-propenoic acid 4-(nitrooxy) butyl ester, having formula:

$$(VI^{C})$$

2-Fluoro-alpha-methyl[1,1'-biphenyl]-4-acetic acid 3-(ni-trooxymethyl)phenyl ester having formula:

(S)-N-acetyl-[2-fluoro-alpha-methyl(1,1'-biphenyl)-4-acetyl] cysteine 4-(nitrooxy)butyl ester having formula:

$$\begin{array}{c} \text{CH}_3 \\ \text{S} \\ \text{O} \\ \text{O} \\ \text{(CH}_2)_4^2 \\ \text{ONO}_2 \\ \text{(VIII}^C) \end{array}$$

2-Fluoro-alpha-methyl[1,1'-biphenyl]-4-acetic acid 6-(nitrooxy methyl)-2methylpyridyl ester having formula

$$F \longrightarrow CH_3 O \longrightarrow N ONO_2$$
 (XI^c)

(S)-6-methoxy-alpha-methyl-2-naphthalenacetic acid 4-(nitrooxy)butyl ester having formula:

MeO
$$(X^{C});$$

(S)-6-methoxy-alpha-methyl-2-naphthalenacetic acid 3-(nitrooxymethyl)phenyl ester having formula:

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

(S)-6-methoxy-alpha-methyl-2-naphthalenacetic acid 6-(nitrooxymethyl)-2-methylpyridyl ester having formula:

$$MeO$$
 CH_3
 ONO_2
 (XII^C)

trans-3-[4-[6-methoxy-alpha-methyl-2-naphthalenacetyl oxy]-3-methoxyphenyl]-2-propenoic acid 4-(nitrooxy)butyl ester having formula:

$$(XIII^{C})$$

(S,S)-N-acetyl-S-(6-methoxy-alpha-methyl-2-naphthaleneacetyl) cysteine 4-(nitrooxy)butyl ester having formula:

$$(XIV^{C})$$

2-[(2,6-dichlorophenyl)amino]benzenacetic acid 4-(nitrooxy methyl)phenylmethyl ester having formula:

2-[(2,6-dichlorophenyl)amino]benzenacetic acid 6-(nitrooxymethyl)-2-methylpyridyl hydrochloride ester having formula:

(S)-3-benzoyl-alpha-methyl-benzenacetic acid 4-(nitro oxybutyl) ester having formula:

$$(XVII^{C})$$

(S)-3-benzoyl-alpha-methyl-benzenacetic acid 3-(nitro oxypropyl) ester having formula:

$$CH_3$$
 CCH_2
 CCH_2

(S)-3-benzoyl-alpha-methyl-benzenacetic 4-(nitro oxymethyl) phenylmethyl ester having formula:

5-benzoyl-2,3-dihydro-1H-pyrrolizine-1-carboxylic acid 4-(nitrooxy)butyl ester having formula:

$$(XXI^{C})$$

2-[(2,6-dichlorophenyl)amino]benzenacetic acid 5 (nitro oxy)ethyloxyethyl ester having formula:

$$C1$$
 $C1$
 $C1$
 $C1$
 $C1$
 $C1$
 $C1$

1-(4-Chlorobenzoyl)-5-methoxy-2-methyl-1H-indole-3-acetic acid 3-(nitrooxymethyl)phenyl ester (XXI^C).

- 8. (Previously Presented) The method of claim 1, wherein the compounds or pharmaceutically acceptable salts thereof of formula (I) are administered by oral, parenteral or topical administration.
- 9. (Previously Presented) The method of claim 1, wherein relapses of degeneration of the cartilaginoid matrix in subjects in need thereof are reduced.
 - 10. (New) The method of claim 4, wherein the R radical is selected from the compounds of Group III.
 - 11. (New) The method of claim 10, R_{2a} is CH_3 , R_{3a} is H, and R_{1a} is

(IX)